IN THE CLAIMS:

The following is a complete listing of all claims, and replaces any prior listing made in this application.

1-23   (cancelled)

24.   (original) A method of inflating a balloon catheter comprising: a) injecting fluid into the balloon catheter at a predetermined rate; b) receiving actual pressure data; c) comparing the actual pressure data to baseline pressure data representative of inflation characteristics of the balloon catheter in a controlled environment; d) adjusting the inflation rate in response to the difference between the actual pressure and the baseline pressure.

25.   (original) The method of claim 24 further comprising: monitoring for a pressure drop of a predetermined magnitude; holding pressure constant in said balloon for a predetermined time after said pressure drop.

26.   (original) The method of claim 24 further comprising: monitoring for a pressure drop of a predetermined magnitude; deflating said balloon after said pressure drop; withdrawing the balloon catheter.

27.   (original) The method of claim 24 further comprising: operably attaching a computerized inflation device to the balloon catheter; programming the computer to perform the steps a), b), c), and d).

28.   (original) The method of claim 24 further comprising: e) recording the actual pressure

data as a function of time.

29.   (original) The method of claim 28 further comprising: f) recording the baseline pressure

data as a function of time.

30.   (original) The method of claim 28 further comprising: f) recording the injection rate as a

function of time.

31.   (original) The method of claim 27 wherein said predetermined rate of step a) comprises

an algorithm providing varying injection rates as a function of time.

32.   (original) The method of claim 24 further comprising: e) defining data safety limits; f)

activating an alarm when the actual pressure data falls outside said safety limits.

33-39 (cancelled)